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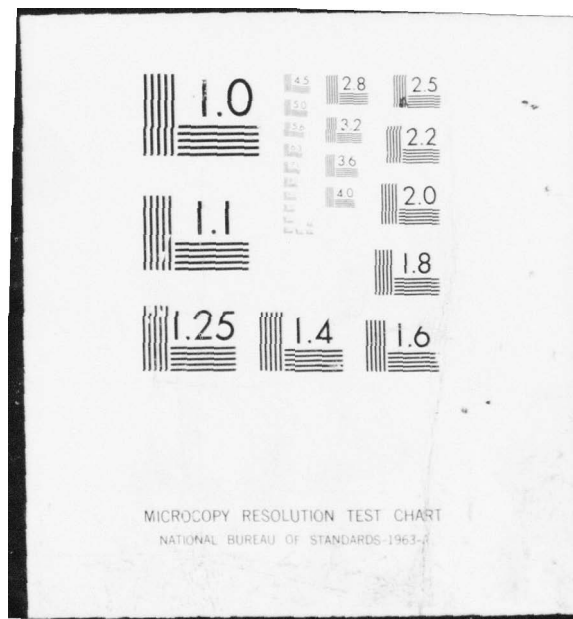
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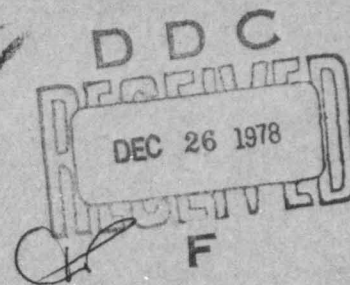


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NAVY PERSONNEL RESEARCH AND DEVELOPMENT CENTER SAN DIEGO, CALIFORNIA 92152

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DECEMBER 1978

**SELECTIVE RETENTION: A LONGITUDINAL  
ANALYSIS: I. FACTORS RELATED TO RECRUIT  
TRAINING ATTRITION**

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SELECTIVE RETENTION: A LONGITUDINAL ANALYSIS.  
I. FACTORS RELATED TO RECRUIT TRAINING ATTRITION

Samuel B. Landau  
Arthur J. Farkas

Reviewed by  
Robert Penn

Approved by  
James J. Regan  
Technical Director

Navy Personnel Research and Development Center  
San Diego, California 92152



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<p>The purpose of the present study, the first in a series of longitudinal turnover investigations, was to assess the impact of individual and organizational variables as multivariate predictors of attrition during recruit training. A sample of 4911 recruits was administered a questionnaire on the fourth day of recruit training to obtain information about various demographics, enlistment motivations, general Navy attitudes, personality variables, and work outcomes. Results indicated important differences between eventual</p>		

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Attrites and nonattrites. The best predictor of attrition was the reported intention to complete one's enlistment. Also, attrites were more influenced to join the Navy because of reactions to events in their civilian environments; and nonattrites, by opportunities to obtain various "self" needs. Attrites also perceived work outcomes as less desirable and did not expect them to occur within a Navy setting to the same extent as did nonattrites. It was concluded that, during recruit training, individual-type variables were more significant predictors of attrition than were organizational variables.

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## FOREWORD

This research and development was conducted in response to Navy Decision Coordinating Paper, Personnel Supply Systems (NDCP-Z0107-PN), under sub-project Z0107-PN.11, Selective Retention: A Longitudinal Analysis, and under the sponsorship of the Deputy Chief of Naval Operations (OP-01). The overall objective of this subproject is to identify factors related to attrition of first-term enlisted personnel that will aid in retaining those who can best benefit the Navy. This will be done by administering attitudinal questionnaires to enlisted personnel at various intervals during their first enlistment. This report, the first in a series, concerns results obtained from questionnaires administered during the first week of recruit training. Subsequent reports will concern results obtained from questionnaires administered at other assessment points.

Appreciation is expressed for the cooperation and assistance provided by the Recruit Training Commands, particularly to Captain Roger D. Munson of RTC San Diego, Commander Roger D. Aydt of RTC Great Lakes, and Commander Barbara J. Suse of RTC Orlando. Also, appreciation is expressed to Alan W. Lau, E. P. Somer, Gary D. Kissler, and PN1 Wojciechowski of NAVPERSRANDCEN for their valuable contributions and suggestions.

DONALD F. PARKER  
Commanding Officer

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## SUMMARY

### Problem

Increasing turnover rates among enlisted personnel, either because of attrition occurring during the first enlistment cycle or their failure to reenlist at the completion of that cycle, results in increasing recruitment, selection, placement, and training costs. During FY78, the attrition rate of first-term enlisted personnel in recruit training exceeded 12 percent. If this rate is to be reduced, the causes of recruit attrition must be identified and corrective measures developed and implemented.

### Purpose

The objective of this research and development was to identify factors that are predictive of attrition during recruit training. This effort is the first in a series designed to identify factors relating to attrition of first-term enlisted personnel at various points during their enlistment.

### Approach

A questionnaire was developed that addressed the relationship between attrition and individual and organizational factors. This questionnaire was administered to 4911 recruits during their fourth day of recruit training to obtain information on their background, motivations for joining, general attitudes toward the Navy, personality dimensions, rated desirability of work outcomes, and expectancies of realizing those outcomes in the Navy and civilian environments.

Questionnaire data obtained for attrites and nonattrites were compared to identify differences between the two groups, and a stepwise multiple regression analysis was performed on responses of a validation sample to determine those variables that best predicted attrition in recruit training. Finally, records of attrites were analyzed to determine reasons for and time of attrition.

### Results

1. At the end of recruit training, 428 recruits or 8.7 percent had attrited.
2. Nonattrites were more likely to join the Navy to meet specific individual goals; and attrites, because of external or environmental influences.
3. Both attrites and nonattrites reported finding recruit training different from their expectations. However, the expectations held by attrites concerning what they would experience in the Navy were generally more negative than those of nonattrites.
4. Nonattrites had given more thought to their enlistment decisions and were more certain of their reasons for joining the Navy than were attrites.

5. Attrites responded more negatively to the work outcomes and did not expect them to be found in the Navy to the same extent as did nonattrites.

6. The best predictor of attrition behavior was the recruit's stated intention to complete the enlistment, followed by his perception of the opportunity to travel provided by the Navy.

7. Most attritions were due to motivational and/or attitudinal problems, and over half had occurred by the end of the fifth week of training.

#### Conclusions

1. Since the reactions of eventual attrites were more negative than those of nonattrites as early as the fourth day of recruit training, it appears that these differences were elicited either prior to enlisting, prior to reporting for active duty, or during the first week of training.

2. Providing a realistic and accurate depiction of positive and negative aspects of Navy life would not only allow individuals to make more knowledgeable enlistment decisions but also serve to make them aware of events that will occur so that they will be better equipped to cope with these events.

3. At the beginning of recruit training, individual variables are more predictive of attrition than organizational variables.

#### Recommendations

1. A preview program that realistically and accurately depicts Navy life should be developed and implemented.

2. In conjunction with this preview program, a method should be developed for teaching recruits how to cope with various stresses of boot camp.

3. A personal counseling program should be provided for individuals who are uncertain about their career goals and how these goals can best be met in the Navy.



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## INTRODUCTION

### Problem

The increasing turnover rates among enlisted personnel have caused increasing concern among Navy manpower planners and policymakers. This turnover is classified as either: (1) attrition, which has to do with recruits being discharged prior to expiration of active obligated service (EAOS) or (2) retention, which has to do with recruits reenlisting after EAOS. This increasing turnover results in increasing costs associated with recruitment, selection, placement, and training.

Attrition of first-term enlisted personnel occurs throughout the enlistment cycle, from recruit training to EAOS. Attrition during recruit training, which is the concern of this report, has increased from around 9 percent in FY72 to over 12 percent in FY78. A certain amount of attrition during recruit training may be desirable; that is, if it rids the Navy of individuals who would cause discipline or performance problems at some later time. However, the Office of the Secretary of Defense (OSD) considers the present rate unacceptable and has mandated that a ceiling of 7-1/2 percent be placed on allowable recruit training attrition for FY79.

This mandate apparently assumes that the present rate of recruit attrition is a function of overly lenient discharge policies. However, if the rate is actually due to other causes, a mandatory reduction in attrition during recruit training may result in such unacceptable outcomes as higher attrition or increased disciplinary problems at some later point in the enlistment. To avoid these and other potential problems, the causes of recruit attrition must be identified so that the most appropriate procedures for reducing recruit attrition can be developed and implemented.

### Purpose

The objective of this effort was to identify factors that are predictive of attrition during recruit training. This effort is the first in a series under a subproject designed to identify factors related to attrition of first-term enlisted personnel. This will be done by analyzing results obtained through attitudinal questionnaires completed by a cohort of enlisted personnel at nine assessment points (see Figure 1) during their enlistment cycle.

This report concerns results obtained from questionnaires administered during the first week of recruit training. Subsequent reports will concern results obtained from questionnaires administered at other assessment points.

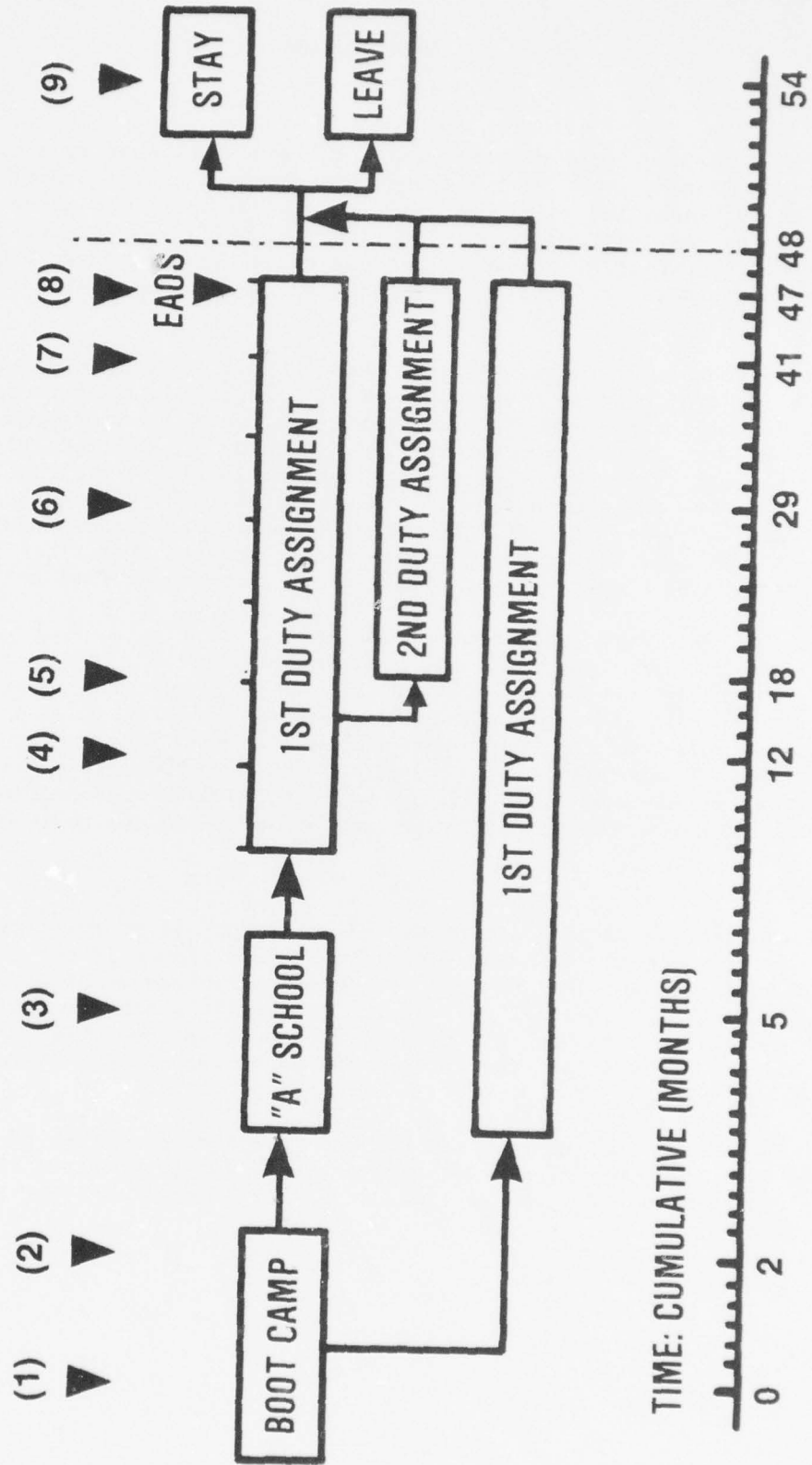


FIGURE 1. ATTITUDINAL ASSESSMENT POINTS FOR USE IN A LONGITUDINAL STUDY OF A COHORT OF FIRST-TERM ENLISTED PERSONNEL

## Background

Several comprehensive reviews of research on civilian and military personnel turnover have been conducted (Brayfield & Crockett, 1955; Schuh, 1967; Porter & Steers, 1973; Mobley, Griffeth, Hand, & Meglino, 1977; Hand, Griffeth, & Mobley, 1977). An overview of this past research has shown that investigations have generally focused on either individual (personal) or organizational (work environment) factors. Individual factors, which have typically received the most attention in attrition/retention research, include assessments of (1) intentions (e.g., how long one intends to stay in the organization), (2) expectations (e.g., what one expects to occur in the organization), (3) demographics (e.g., age, education, marital status, and number of dependents), and (4) personality attributes. Organizational factors have been concisely grouped by Porter and Steers (1973) into three categories: (1) general organizational considerations (e.g., size, structure, and pay), (2) perceptions of the immediate work environment (e.g., supervisors, peers, and habitability), and (3) perceptions of aspects of the job itself (e.g., autonomy, repetitiveness, and responsibility). The specific variables associated with individual and organizational factors are discussed below.

### Individual Factors

Behavioral Intentions. The most consistent predictor of turnover behavior has been the stated intention to either remain within or leave the organization (Newman, 1974; Kraut, 1975; Bruni, James, & Jones, 1975; Mobley et al., 1975; Lau, 1978). Atchinson and Lefferts (1972) found a positive relationship between the frequency that Air Force pilots thought about quitting and their actual termination behavior, and that the closer in time that reenlistment intentions were measured to the actual behavioral decision, the more accurately intentions predicted behavior. However, Graen and Ginsburgh (1977) reported that the closer in time intentions were measured to the actual behavior the less valuable or meaningful such predictions become.

Expectations. Porter and Steers (1973) found that there was a relationship between expectations and turnover behavior. Hoiberg and Berry (1978) reported that recruits who were discharged during training had inaccurate expectations of that training; and Knowles (1964), that receiving expected wages was significantly related to staying on the job. Further, Weitz (1956) found that individuals who had received a realistic job preview, which included both positive and negative aspects, had higher retention rates than those who had not received such a review. Finally, Katzell (1968) found that students who remained in school felt that their initial expectations had been met to a greater extent than those who left.

Demographics. Variables such as age, education, marital status, and number of dependents have typically been assessed (often through the use of post hoc, univariate, archival, and/or descriptive analyses). These procedures have resulted in moderate, yet consistent findings: Nonattritees/reenlistees generally are older, are married, have larger families, and come from lower socioeconomic backgrounds than do attritees/nonreenlistees (Stoloff, Lockman, Allbritton, & McKinley, 1973; Lockman, Stoloff, &

Allbritton, 1972; Bruni et al., 1975; Lockman & O'Neill, 1973; LaRocco, Pugh, & Gunderson, 1977; Glickman, Goodstadt, Korman, & Romanczuk, 1973; Lockman, 1975; Sands, 1976).

Personality Attributes. While personality attributes generally have been weakly related to turnover behavior, locus of control (internality/externality) measures have shown promise as moderator variables (Porter & Steers, 1973; Bruni et al., 1975). For example, Broedling (1975) reported that internals (as measured on the locus-of-control personality dimension) were motivated to work harder than were externals. Additionally, internals and externals have been found to react differently to leadership styles (Mitchell, Smyser, & Weed, 1975; Lau, Pavett, & Seybolt, 1976) that may affect subsequent turnover decisions.

### Organizational Factors

The variables described below were based, to a large extent, on the classification developed by Porter and Steers (1973) mentioned previously.

#### General Organizational Considerations.

1. Satisfaction. Results of past research have indicated that consistent relationships exist between various organizational satisfactions and turnover behavior (Vroom, 1964; Porter & Steers, 1973; Brayfield & Crockett, 1955; Mobley et al., 1977; Freeman, 1978). Turnover among Navy personnel has generally been found to be lower among individuals who were more satisfied with (a) Navy life in general and (b) specific aspects of Navy life (e.g., pay, supervisors, peers, and the job itself) (LaRocco, Pugh, & Gunderson, 1977; Orend, Stroad, & Michaels, 1976; Bruni et al., 1975; Drexler, 1975; Bowers, 1973; Drexler & Bowers, 1973; Stoloff et al., 1973; Lockman et al., 1972).

2. Pay and Promotions. Inconclusive results have been obtained from research on these two variables. Generally, a negative relationship has been found between pay/promotions and turnover (Friedlander & Walton, 1964; Ronan, 1967; Hulin, 1968). Similarly, in several military settings, general economic conditions and pay increases were found to influence reenlistment behavior (Lockman & O'Neill, 1973; Lockman et al., 1972). Telly, French, and Scott (1971), however, did not find any significant relationship between perceived pay/promotion inequities and turnover. On the other hand, Knowles (1964) reported that the extent to which expectancies about pay were met was a better predictor of turnover than actual pay.

Perceptions of Immediate Work Environment. This heading includes the effects of supervisory styles on employee behavior. Turnover was highest for work groups who rated their supervisors low in consideration (Fleischman & Harris, 1962; Hulin, 1968). The more perceived inequity in treatment received from supervisors, the lower the satisfactions and the higher the resultant turnover (Telly et al., 1971; Stoloff et al., 1973).



Peer relationships also have been related to turnover. The importance of group cohesiveness as a limiting determinant of turnover has been found by several investigators (Bowers, 1973; Drexler & Bowers, 1973; Lott & Lott, 1965; Stogdill, 1974; Drexler, 1975; Farris, 1971; Terborg, Castore, & DeNinno, 1976). Porter and Steers (1973), however, report both confirming and disconfirming evidence regarding the importance of peer relationships and turnover.

Perceptions of Job Aspects. Within the job itself, aspects such as task repetitiveness, job challenge, boredom, autonomy, and feedback have been associated with turnover (Hackman & Lawler, 1971; Hackman & Oldham, 1975; Guest, 1955; Wild, 1970; Orend et al., 1976).

### Conclusions

Caution must be exercised when interpreting the results of many of these investigations. Since many of the findings are based on post hoc, descriptive data, only limited inferences and generalizations can be drawn. Furthermore, data have typically been collected at only one point in time, usually 2 years or less prior to EAOS, after most attritions have occurred. Thus, potentially valuable information, such as that concerning initial motivations and changes in attitudes, was not available for either attrites or nonattrites. Furthermore, these variables have traditionally been assessed from a univariate perspective so that shared variance between variables has not been considered. Thus, the variance accounted for by each of these variables may have been artificially inflated. Although outcomes using these procedures have suggested important relationships with attrition, they have added little toward understanding the turnover process and how it may be modified.

### Military Turnover Model

A conceptual model, developed from the findings described above, was utilized to investigate the combined, interactive effects and relative contributions of both individual and organizational variables as they impact upon attrition/retention (see Figure 2). The need for such an approach has been suggested by many investigators (Porter & Steers, 1973; Goodstadt & Glickman, 1975; Mobley et al., 1977; Sinaiko, 1977; Lau, 1978). The model employed was based on a generalized expectancy model of organizational behavior that assumes that work-related behavioral choices can be predicted from (1) the valences attached to various role outcomes and (2) the subjective assessment of the probability of attaining these outcomes (Vroom, 1964; Campbell, Dunnette, Lawler, & Weick, 1970; Heneman & Schwab, 1972; Mitchell, 1974; Locke, 1975).

In the present study, the expectancy model was used to assess the relationship between various work-related outcomes and turnover behavior. In these assessments, it was hypothesized that the behavioral choice to stay in or leave the Navy depended on the value of each work outcome and the expectancy of obtaining that outcome within either a Navy or a civilian environment. For example, if the desirability of "having supervisors who are helpful" defines the value of one work outcome, then the product of this value and the likelihood of obtaining it in the Navy would, in part, measure the attractiveness of the Navy as a role choice. Attractiveness ratings for



these outcomes can then be combined to produce an index of each individual's role strength for working within either a Navy or a civilian environment. Direct comparisons between the attractiveness of these two environments can thus be made (Schneider, 1976; Mitchell, 1974; Thibaut & Kelley, 1959) to assess differences in the attractiveness of the Navy as a role choice for recruit training attrites and nonattrites. Furthermore, because of the longitudinal design being employed, changes in the attractiveness ratings can be assessed over time.

**INDIVIDUAL (PERSONAL)  
FACTORS**

- DEMOGRAPHICS
- MOTIVATIONS FOR JOINING
- GENERAL ATTITUDES
- PERSONALITY ATTRIBUTES

**ORGANIZATIONAL (WORK  
ENVIRONMENT) FACTORS**

- GENERAL ORGANIZATIONAL CONSIDERATIONS  
(E.G., SIZE, PAY, POLICIES, STRUCTURE)
- IMMEDIATE WORK ENVIRONMENT  
(E.G., SUPERVISION, PEERS, HABITABILITY,  
BOREDOM, FREE-TIME)
- JOB CONTENT ASPECTS  
(E.G., AUTONOMY, REPETITIVENESS,  
RESPONSIBILITY, ROLE CLARITY)

**COMPARISONS**

ALTERNATIVE  
WORK/JOB  
EVALUATIONS

**INTENTIONS**

- ATTRITION
- REENLISTMENT
- CAREER MOTIVATION

**OUTCOMES**

- SATISFACTIONS
- PERFORMANCE
- TURNOVER
  - ATTRITION
  - RETENTION RATES

FIGURE 2. RESEARCH MODEL OF MILITARY TURNOVER

## METHOD

### Subjects

Subjects consisted of 4911 enlisted personnel who were tested on their fourth day of recruit training in June or July 1977. The distribution of these subjects by recruit training center is shown in Table 1.

Table 1

Distribution of Subjects by Recruit Training Centers

RTC	Number of Recruits			Percent of Sample
	Male	Female	Total	
Great Lakes	2228	0	2228	45.4
Orlando	1528	214	1742	35.5
San Diego	941	0	941	19.1
Total	4697	214	4911	100.0

### Measurement Instrument

A questionnaire (see appendix) was developed to collect data on individual (personal) and organizational (environmental) factors. Items designed to obtain these data are discussed below.

#### Individual Factors

Demographics. Items were included to obtain data on respondents' age, sex, education level, and marital status. (Data on AFQT and race were collected from the Enlisted Master Tape.)

Motivations for Joining. Nineteen items, based on results of interviews, pilot data, and previous research, were included to assess the influence of various factors on decisions to join the Navy. Responses were scored on a 5-point Likert-type scale that ranged from "No Influence" to "Strong Influence."

Intentions, Expectations, and General Attitudes. Fifteen items were included to assess respondents' intentions (e.g., to complete enlistment), expectations (e.g., of boot camp), and general attitudes (e.g., amount of thought given to enlisting). Responses to these items were made on a 5-point Likert-type scale that ranged from "Greatly Disagree" to "Greatly Agree."

Personality Attributes. Because of space limitations, a modified version of Rotter's Internality-Externality (I-E) Locus of Control scale (1966) was included. It consisted of the eight items with the highest reliability and validity indices (Robinson & Shaver, 1969). Individuals who score on the internal end of the scale perceive having some control over events in their lives, and those scoring on the external end, having little control. Each item consisted of a dichotomous response alternative; subjects were to select that alternative they most closely agreed with. An index based on the sums of the I-E measures was computed: Low scores indicated "internal" orientations; and high scores, "external" orientations.

#### Organizational Factors

Outcome Desirability Ratings. Respondents were presented with a list of 55 work-outcome variables. These outcomes were selected since findings of previous research showed that they were related to (1) general organizational considerations, such as pay policies and group size, (2) the immediate work environment, such as peer relationships, leadership, and habitability considerations, and/or (3) job aspects, such as autonomy, repetitiveness, and role clarity. Subjects were asked to indicate, by means of a 5-point Likert-type scale, the extent to which they would like to have the outcomes associated with work situations, in general. Responses ranged from "Would Greatly Dislike" to "Would Greatly Like."

Outcome Environmental Expectancies. For each of the 55 work outcomes, subjects were asked to indicate whether they would most likely expect them to occur in Navy or civilian life. Responses were to be made on a 5-point scale ranging from "Much More in Civilian Life" to "Much More in the Navy."

#### Procedure

Questionnaires were administered to recruit companies during the fourth day of the first week of recruit training. The number of recruits within companies varied, as well as the number of companies tested at any one session. For example, company size ranged from 50 to 80 recruits.

Questionnaires were presented in booklet format, and responses were recorded on machine-readable answer sheets. Instructions on how to complete the answer sheets were not only included in the booklets but were also read to the groups at each testing session.

#### Analyses

1. Comparisons were made between responses made by attrites and non-attrites to identify any differences between the two groups.

2. Role attraction and role force indices were computed for all subjects. The role attraction index was determined by summing the cross products of the subject's outcome-desirability ratings and the outcome-expectancies. In this manner, a representation of the relative role

strength for being in the Navy was obtained. A positive score indicated a positive attraction for being in the Navy; and a negative score, a negative attraction (i.e., the civilian environment was perceived as more attractive). Values for this index potentially ranged between scores of -110 to +110. Zero values would indicate no preferential attraction for working either in the Navy or a civilian environment. Role force indices were based on the individual's attraction index weighted by his stated intention to complete his enlistment, to complete recruit training, and to reenlist.

3. To determine the combination of variables that best predicted recruit training attrition, a stepwise multiple-regression was performed using attrition/nonattrition as the criterion, and organizational and personal variables as predictors.

4. Records for attrites were analyzed to determine the reasons for their attrition and when that attrition occurred.



## RESULTS

Of the 4911 subjects who were tested on their fourth day of recruit training in June or July 1977, 428 (417 males and 11 females) or 8.7 percent attrited, and 4483 (4280 males and 203 females) or 91.3 percent remained on duty.

### Measurement Instrument Data--Attrites vs. Nonattrites

#### Individual Factors

Demographics. Table 2, which compares demographic data for attrites and nonattrites, shows that attrites had less formal education, were more likely to be married, were slightly older, and had lower AFQT scores than nonattrites. However, no significant differences were found between the two groups as to sex, race, or location of recruit training center.

Motivations for Joining. Table 3 compares responses of attrites and nonattrites on items assessing their motivations for joining the Navy. As shown, in most cases, the rank ordering of the motivations listed was the same for both groups.

Both groups felt that the most important reasons for joining the Navy dealt with opportunities to obtain specific individual outcomes (e.g., skills, education, opportunity to travel, job security, and benefits). When considering the amount of influence these factors had on enlistment decisions, it can be seen that the attrites were less strongly influenced by them than were the nonattrites. Conversely, the factors that had the least amount of reported influence for joining the Navy were more influential in the enlistment decisions of the attrites than of the nonattrites. These influences reflected responses to environmental events (e.g., trouble within the family, nothing else to do, lack of a job, or the influence of a recruiter).

To determine whether the motivations for joining the Navy reflected any basic constructs, a factor analysis using a varimax factor rotation was performed. Table 4, which provides results of this analysis, shows that three basic factors emerged, which accounted for 81.8 percent of the variance. The first two factors reflect different types of personal acquisition needs. The first factor, "maturity," suggests the need for intrinsic outcomes that respondents feel the Navy provides; and the second, "self-improvement," the need for tangible or objectively measurable outcomes. The third factor, "situational-environmental," on the other hand, represents external, situational, or environmental events that motivated respondents to join the Navy. When this information is related to the results shown in Table 3, it becomes apparent that recruit training attrites were more influenced to join the Navy because of external or situational determinants; and nonattrites, by acquisition-needs, both tangible and intangible in nature.



Table 2  
Comparison of Demographic Variables for  
Attrites (N = 428) and Nonattrites (N = 4483)

Variable	Attrites (%)	Nonattrites (%)	$\chi^2$	df	
Education			41.59**	3	
Less than high school	28.5	16.6			
GED	8.4	6.2			
High school	55.7	67.8			
More than high school	7.4	9.3			
Total	100.0	99.9			
Marital Status			14.78**	2	
Never married	90.0	94.4			
Married	8.1	4.1			
Previously married	1.9	1.6			
Total	100.0	100.1			
Sex			3.09	1	
Male	97.4	95.4			
Female	2.6	4.6			
Total	100.0	100.0			
Race			2.39	2	
Caucasian	85.8	85.3			
Negro	9.9	11.3			
Other	4.3	3.3			
Total	100.0	99.9			
Recruit Training Location			5.46	2	
San Diego	32.2	18.0			
Orlando	31.7	36.0			
Great Lakes	36.2	46.0			
Total	100.1	100.0			
<hr/>					
	Mean	S.D.	Mean	S.D.	t
AFQT Score	51.14	16.14	58.58	17.82	8.66**
Age	20.0	3.61	19.64	3.32	-1.97*

Note. Totals do not always equal 100 percent due to rounding.

\*p < .05

\*\*p < .01

Table 3  
Comparison of Motivations for Joining the Navy for  
Attrites (N = 428) and Nonattrites (N = 4483)

Motivation for Joining	Group	Percentage Reporting Influence Level			Mean <sup>a</sup>	S.D.	t
		No or Little	Some	Much or Strong			
To learn a skill	Attrite	13.7	16.4	69.8	3.93	1.27	5.48*
	Nonattrite	6.0	12.5	81.5	4.27	.98	
To get an education	Attrite	19.0	22.6	58.3	3.66	1.34	7.09*
	Nonattrite	9.3	14.6	76.0	4.14	1.10	
To travel	Attrite	23.1	23.1	53.8	3.48	1.33	5.45*
	Nonattrite	11.9	23.1	65.0	3.84	1.14	
Job security	Attrite	29.5	20.6	50.0	3.32	1.43	4.01*
	Nonattrite	19.1	23.0	57.9	3.60	1.35	
Benefits (financial, medical, insurance)	Attrite	26.9	25.5	47.7	3.30	1.33	4.22*
	Nonattrite	17.0	28.5	54.4	3.58	1.18	
Time to decide what I want to do with my life	Attrite	31.8	23.9	44.3	3.19	1.47	2.60*
	Nonattrite	26.1	24.2	49.7	3.39	1.35	
To develop a sense of responsibility	Attrite	29.5	25.8	44.8	3.19	1.36	2.77*
	Nonattrite	23.0	27.0	50.0	3.38	1.23	
To be part of something important	Attrite	36.2	25.9	37.8	3.00	1.38	4.66*
	Nonattrite	25.2	28.4	46.4	3.32	1.25	
To serve my country	Attrite	38.1	33.9	28.1	2.87	1.28	2.66*
	Nonattrite	27.9	42.0	30.2	3.04	1.12	
To mature	Attrite	42.7	26.3	31.0	2.77	1.37	3.55*
	Nonattrite	34.9	27.8	37.4	3.00	1.30	
Want naval career	Attrite	48.6	23.9	27.5	2.64	1.42	4.80*
	Nonattrite	35.4	31.0	33.5	2.98	1.32	
Going to sea	Attrite	49.8	24.9	25.3	2.57	1.41	3.00*
	Nonattrite	42.7	26.7	30.5	2.78	1.34	
To get away from home	Attrite	58.9	23.2	17.8	2.25	1.30	.90
	Nonattrite	58.1	24.2	17.6	2.31	1.23	
My recruiter	Attrite	51.5	23.3	25.2	2.57	1.39	-4.27*
	Nonattrite	60.5	23.6	15.7	2.27	1.19	
Difficulty in finding a civilian job	Attrite	51.7	17.2	31.1	2.57	1.57	-3.85*
	Nonattrite	61.3	15.9	22.9	2.27	1.43	
Advice from family members	Attrite	61.6	19.3	19.1	2.25	1.34	-1.69
	Nonattrite	64.0	20.7	14.9	2.14	1.24	
Friends	Attrite	73.1	16.5	10.4	1.89	1.17	-1.72
	Nonattrite	76.3	15.3	8.3	1.79	1.08	
Had nothing better to do	Attrite	68.5	17.8	13.6	2.03	1.28	-4.64*
	Nonattrite	78.9	12.3	8.7	1.73	1.10	
Trouble with family members	Attrite	77.4	11.0	11.6	1.75	1.23	-4.66*
	Nonattrite	87.1	7.5	5.4	1.47	.94	

<sup>a</sup> Based on 5-point scale (1 = No influence; 5 = Strong influence)

\*p < .01

Table 4  
Factor Analysis of Motivations for Joining<sup>a</sup>

Factor	Motivation	Loading
I: Maturity	To develop a sense of responsibility	.78
	To mature	.73
II: Self-improvement	Job security	.63
	To learn a skill	.54
	To get an education	.48
	Benefits (financial, medical, insurance)	.45
III: Situational-environmental	Advice from family members	.39
	Friends	.39
	My recruiter	.37
	Had nothing better to do	.37
	Difficulty in finding a civilian job	.35

<sup>a</sup> Based on responses of 4863 subjects who completed all motivation items.

Intentions, Expectations, and General Attitudes. A comparison of responses of attrites and nonattrites to items assessing general impressions and attitudes toward the Navy is shown in Table 5.

1. Intentions. As shown, the responses of attrites differed significantly from those of the nonattrites on all five intention items. The largest difference occurred for the item concerning intention to complete one's enlistment: 91 percent of nonattrites agreed with this intention, compared to 61 percent of attrites. Similar results were found for the item on intentions to complete boot camp. For the item on intention of having a naval career, however, attrites reported more disagreement and less uncertainty about their intentions than did nonattrites. Further, attrites agreed more often than nonattrites with the intentions "not to reenlist" and "to leave the Navy if it were possible."

2. Expectations. Although items concerning recruiters are not strictly considered to be expectations items, they were included in this category because information supplied by recruiters was assumed to affect recruit's expectations of boot camp and the Navy. Table 5 shows that a larger percentage of attrites than nonattrites indicated that their recruiters had not been truthful and had not supplied sufficient information. Further, a larger percentage of attrites than nonattrites expected to do more desirable things in boot camp, felt that boot camp differed from their expectations, and expected the Navy to be a continuation of boot camp. These differences occurred despite the fact that most of the nonattrites also found boot camp to be different from their expectations.

3. General Attitudes. Attrites reported being less satisfied with the Navy than were nonattrites. As far as enlistment decisions were concerned, attrites indicated they had given less thought and were more uncertain about why they had made that decision than were nonattrites. Similarly, attrites regretted having made the decision to join the Navy and thought more about leaving than did nonattrites.

Personality Attributes. No significant differences were found between responses of attrites and nonattrites to the locus of control items.

#### Organizational Factors

Outcome Desirability Ratings. Table 6 presents the 55 work outcomes according to their overall desirability ranking indicated by the total group. Overall, when differences between groups occurred, attrites generally responded more negatively than did the nonattrites. The most desirable outcomes generally were rated more positively by the nonattrites, while the least desirable outcomes showed no differences between groups. Yet, for the remainder of the less desirably rated outcomes, attrites responded more negatively than did the nonattrites. For the middle range outcomes, nonattrites were generally more positive than were the attrites.

Table 5

Comparison of Intentions, Expectations, and General Attitudes  
Toward the Navy of Attrite (N = 428) and Nonattrite (N = 4483)

Item	Group	Percentage of Recruits Reporting <sup>a</sup>			Mean <sup>b</sup>	S.D.	t
		Disagree	Uncertain	Agree			
<u>Intentions</u>							
To complete enlistment	Attrite	19.5	19.2	61.3	3.76	1.46	12.73*
	Nonattrite	3.2	5.9	90.8	4.68	.80	
To complete boot camp	Attrite	16.3	15.9	67.7	3.95	1.45	10.78*
	Nonattrite	3.2	4.7	92.0	4.72	.80	
To have naval career	Attrite	41.1	39.3	19.6	2.54	1.35	7.24*
	Nonattrite	21.3	53.6	25.2	3.03	1.15	
Not to reenlist	Attrite	20.4	41.3	38.3	3.33	1.37	-6.00*
	Nonattrite	24.6	56.4	18.9	2.92	1.42	
Would leave if possible	Attrite	36.7	25.2	38.1	3.01	1.57	-12.24*
	Nonattrite	65.6	20.4	14.1	2.05	1.28	
<u>Expectations</u>							
Recruiter was generally truthful	Attrite	45.0	17.1	37.9	2.84	1.49	4.63*
	Nonattrite	30.0	15.7	48.2	3.19	1.39	
Expect to do things in boot camp I do not like	Attrite	13.8	13.1	73.1	4.04	1.29	3.39*
	Nonattrite	8.8	9.6	81.6	4.26	1.08	
Many things recruiter did not discuss	Attrite	15.2	7.7	77.1	4.10	1.32	-4.41*
	Nonattrite	21.3	9.3	69.4	3.80	1.40	
Boot camp really like the Navy	Attrite	45.6	33.4	21.0	2.53	1.29	-4.54*
	Nonattrite	55.6	31.9	12.5	2.24	1.17	
Boot camp different from expectation	Attrite	12.1	11.0	76.9	4.12	1.20	-4.67*
	Nonattrite	20.9	7.7	71.5	3.83	1.34	
<u>General Attitudes</u>							
Gave much thought to enlisting	Attrite	22.5	14.8	62.7	3.62	1.42	8.56*
	Nonattrite	9.6	8.6	81.9	4.23	1.08	
Generally satisfied so far	Attrite	40.2	22.7	37.2	2.90	1.39	7.91*
	Nonattrite	24.6	19.9	55.5	3.45	1.23	
Do not know why I joined	Attrite	52.1	16.1	31.8	2.61	1.58	-10.07*
	Nonattrite	76.9	9.4	13.7	1.82	1.23	
Regret joining the Navy	Attrite	41.6	22.9	35.5	2.87	1.56	-11.39*
	Nonattrite	70.0	17.6	12.4	1.99	1.18	
Think a lot about getting out	Attrite	35.5	17.1	47.4	3.15	1.54	-11.63*
	Nonattrite	64.9	11.0	24.1	2.25	1.36	

<sup>a</sup>Disagree percentages reflect "Greatly Disagree" and "Some Disagreement" responses; and agree percentages, "Greatly Agree" and "Some Agreement" responses.

<sup>b</sup>Based on 5-point scale (1 = Greatly Disagree, 5 = Greatly Agree).

\*p < .01



Table 6

Comparisons of Work Outcome Desirability Ratings and Environmental Expectancies  
for Attrites (N = 428) and Nonattrites (N = 4483)

Rank	Outcome	Group	Desirability Ratings				Environmental Expectancies					
			Percentage Indicating <sup>a</sup>		Statistics		Percentage Indicating <sup>b</sup>		Statistics			
			Dislike	Neither Like Nor Dislike	Like	Mean <sup>c</sup> S.D.	Civilian	Equally Civilian/Navy	Navy	Mean <sup>d</sup> S.D.		
1	Good Salary	Attrite Nonattrite	3.0 0.7	8.0 3.2	88.9 96.1	1.55 1.73	4.53* .83 .57	29.2 31.3	38.3 40.9	.02 .11	.71 .63	
2	Learning skills that will be useful later in my life	Attrite Nonattrite	1.9 0.9	10.8 2.4	87.3 96.8	1.45 1.73	7.02* .79 .56	30.8 20.9	56.1 75.0	.36 .58	.61 .48	
3	Chance to use my free time for things I like to do	Attrite Nonattrite	2.6 0.8	3.7 2.7	93.7 96.5	1.64 1.70	4.53* .70 .58	23.8 26.5	18.2 17.3	-.36 -.31	.70 .63	
4	Chances to better myself	Attrite Nonattrite	3.1 0.5	8.5 2.5	88.5 96.9	1.43 1.71	6.86* .84 .55	27.8 25.5	49.5 66.1	.18 .43	.65 .52	
5	Doing the type of work I want	Attrite Nonattrite	2.5 0.7	8.2 4.6	89.2 94.6	1.52 1.68	4.05* .82 .61	32.5 32.2	25.5 44.6	-.01 .16	.69 .61	
6	Good benefits (medical, insurance)	Attrite Nonattrite	1.8 0.7	9.6 3.3	88.4 96.0	1.45 1.66	5.14* .81 .59	21.5 15.4	66.1 80.5	.44 .65	.62 .47	
7	Taking pride in my work	Attrite Nonattrite	2.4 0.6	8.9 2.8	88.8 96.6	1.36 1.65	7.16* .82 .58	39.7 44.1	37.4 49.2	.11 .32	.63 .51	
8	Being treated in a fair manner	Attrite Nonattrite	3.3 1.0	4.7 2.7	92.1 96.3	1.44 1.62	4.65* .81 .62	32.5 41.2	29.5 31.3	-.07 .03	.65 .55	
9	Supervisors/leaders who think of me as a person	Attrite Nonattrite	2.8 1.0	7.5 3.9	89.7 95.0	1.46 1.61	3.83* .83 .63	31.1 36.0	25.7 28.4	-.15 -.05	.67 .60	
11.5	Knowing exactly what I'm expected to do on my job	Attrite Nonattrite	1.9 0.7	10.6 3.9	87.5 95.4	1.35 1.58	5.85* .76 .61	44.6 41.0	38.1 50.5	.13 .30	.56 .49	
11.5	Chances to fully use my abilities on the job	Attrite Nonattrite	1.9 0.6	13.1 3.8	85.0 95.5	1.32 1.58	6.33* .82 .61	41.1 36.6	36.5 54.0	.12 .35	.62 .53	

<sup>a</sup>Dislike percentages reflect "Would Greatly Dislike" and "Would Dislike" responses; and like percentages, "Would Greatly Like" and "Would Like" responses.

<sup>b</sup>Civilian percentages reflect "Much More in Civilian Life" and "A Little More in Civilian Life" responses; and Navy percentages, "Much More in the Navy" and "A Little More in the Navy" responses.

<sup>c</sup>Based on a 5-point rating scale (-2 = Would Greatly Dislike; +2 = Would Greatly Like).

<sup>d</sup>Based on a 5-point rating scale (-1 = Much More in Civilian Life; +1 = Much More in the Navy).

\*p < .01

Table 6 (Continued)

Rank	Outcome	Group	Desirability Ratings			Statistics			Environmental Expectancies					Statistics	
			Percentage Indicating <sup>a</sup>			Mean <sup>c</sup>	S.D.	t	Percentage Indicating <sup>b</sup>			Mean <sup>d</sup>	S.E.	F	
			Dislike	Neither Like Nor Dislike	Like				Civilian	Equally Civilian/Navy	Navy				
11.5	Improving the quality of my life	Attrite Nonattrite	2.6 0.7	11.2 5.3	86.2 94.0	1.38 1.58	.85 .64	4.84*	21.5 8.2	33.6 28.3	44.9 63.5	.15 .39	.62 .51	7.92*	
11.5	Able to talk and work well with others	Attrite Nonattrite	2.6 0.8	11.6 4.4	85.8 94.8	1.37 1.58	.84 .63	4.87*	35.0 27.5	36.7 41.2	28.3 31.3	-.08 .03	.67 .53	4.98*	
14.5	Helpful supervisors/ leaders	Attrite Nonattrite	4.6 1.0	11.0 5.1	84.3 93.9	1.30 1.56	.92 .65	5.78*	26.4 15.1	36.0 40.0	37.6 44.9	.07 .21	.63 .52	4.40*	
14.5	Treated with respect by leaders/supervisors	Attrite Nonattrite	4.9 1.8	6.6 6.0	88.5 92.2	1.42 1.55	.93 .73	2.69*	39.0 32.3	29.0 33.1	32.0 34.5	-.09 .02	.62 .51	2.91*	
16.5	Regular promotions and advancements	Attrite Nonattrite	3.5 0.8	12.4 5.0	84.1 94.3	1.33 1.55	.88 .64	5.16*	18.7 7.4	30.1 25.8	51.2 66.8	.24 .45	.62 .52	6.54*	
16.5	Good working conditions	Attrite Nonattrite	6.4 1.4	8.9 4.9	84.8 93.8	1.25 1.56	.99 .68	6.29*	28.1 16.5	33.9 41.2	38.1 42.2	.05 .18	.53 .53	4.18*	
19	Getting credit when I do my work duties well	Attrite Nonattrite	1.8 0.9	15.0 6.0	83.1 93.1	1.34 1.53	.83 .67	4.66*	29.3 21.1	36.9 38.4	33.9 40.5	.04 .14	.62 .52	3.47*	
19	Treated with respect by family and friends	Attrite Nonattrite	1.0 0.7	13.4 7.4	85.6 91.9	1.41 1.53	.77 .68	3.15*	28.5 13.9	39.3 43.3	32.3 42.9	.001 .20	.64 .53	6.29*	
19	Having job security	Attrite Nonattrite	4.0 0.8	15.2 6.9	80.8 92.3	1.26 1.55	.92 .64	6.25*	14.7 5.2	30.6 20.9	54.7 74.0	.31 .54	.63 .52	7.49*	
21.5	Supervisors/leaders who set good examples for others to follow	Attrite Nonattrite	3.3 0.7	13.1 5.8	83.6 93.3	1.26 1.49	.86 .66	5.41*	21.1 7.5	35.0 31.4	43.7 61.1	.40 .16	.52 .52	3.69*	
21.5	Chance to travel	Attrite Nonattrite	8.2 2.3	12.9 8.7	78.9 89.1	1.16 1.50	1.09 .79	6.32*	12.1 3.1	16.8 8.6	71.0 88.3	.53 .78	.62 .42	5.16*	

<sup>a</sup>Dislike percentages reflect "Would Greatly Dislike" and "Would Dislike" responses; and like percentages, "Would Greatly Like" and "Would Like" responses.

<sup>b</sup>Civilian percentages reflect "Much More in Civilian Life" and "A Little More in Civilian Life" responses; and Navy percentages, "Much More in the Navy" and "A Little More in the Navy" responses.

<sup>c</sup>Based on a 5-point rating scale (-2 = Would Greatly Dislike; +2 = Would Greatly Like).

<sup>d</sup>Based on a 5-point rating scale (-1 = Much More in Civilian Life; +1 = Much More in the Navy).

\*p < .01

Table 6 (Continued)

Rank	Outcome	Group	Desirability Ratings					Environmental Expectancies				
			Percentage Indicating <sup>a</sup>			Statistics		Percentage Indicating <sup>b</sup>			Statistics	
			Dislike	Neither Like Nor Dislike	Like	Mean <sup>c</sup>	S.D.	Civilian	Civilian/Navy	Navy	Mean <sup>d</sup>	S.D.
									Equally Civilian/Navy			t
23	Good leadership/ supervision	Attrite Nonattrite	4.2 0.9	16.1 6.0	79.7 93.1	1.14 1.49	.90 .67	20.3 6.6	3.62 32.1	43.5 61.3	.15 .39	.60 .48
24	Friendly feelings between co-workers	Attrite Nonattrite	3.5 1.0	12.2 4.9	84.3 94.2	1.21 1.47	.86 .66	27.9 15.0	44.9 53.1	27.3 32.0	-.01 .12	.57 .48
25	Supervisors/leaders willing to listen to my problems	Attrite Nonattrite	2.8 1.1	9.6 8.8	87.6 90.1	1.39 1.43	.81 .72	34.4 23.1	35.0 40.8	30.7 36.1	-.03 .09	.66 .54
26	Co-workers who are helpful on the job	Attrite Nonattrite	2.8 1.0	10.3 4.7	86.9 94.3	1.22 1.40	.81 .65	25.7 9.9	43.9 44.6	30.4 45.6	.02 .25	.61 .51
27	Opportunity to have privacy	Attrite Nonattrite	3.9 1.5	12.9 12.2	83.3 86.3	1.33 1.38	.88 .78	59.1 60.1	23.8 24.2	17.0 15.7	.38 -.37	.69 .63
28	Working as part of a team	Attrite Nonattrite	8.4 2.1	17.1 10.9	74.4 87.0	1.07 1.39	1.10 .80	13.3 7.8	24.3 41.8	62.3 50.3	.38 .59	.60 .45
29	Interesting work/job duties	Attrite Nonattrite	6.9 1.7	17.3 9.9	75.9 88.4	1.04 1.34	1.04 .75	22.0 16.8	42.3 43.4	35.7 43.9	.07 .22	.61 .54
30	Meeting and making new friends	Attrite Nonattrite	3.8 0.8	14.5 8.2	81.8 90.9	1.16 1.36	.87 .68	21.0 6.9	38.8 32.5	40.2 60.7	.14 .42	.63 .52
31	Gaining responsibility	Attrite Nonattrite	5.3 1.5	22.2 9.8	72.4 88.7	1.02 1.34	.96 .73	19.8 7.1	36.2 33.4	43.9 59.5	.16 .36	.61 .48
32	Able to question super- visors/leaders about what they want me to do	Attrite Nonattrite	4.0 2.4	18.5 11.7	77.4 86.0	1.14 1.24	.93 .78	36.5 30.1	40.0 39.2	23.6 30.7	-.10 .01	.62 .59
33	Helping others on the job	Attrite Nonattrite	4.4 1.3	19.4 12.7	76.1 86.1	1.02 1.21	.90 .72	19.1 8.4	44.2 45.6	36.7 46.0	.12 .26	.58 .46
34	Doing something impor- tant for my country	Attrite Nonattrite	6.1 1.5	27.4 17.7	66.5 80.8	.89 1.20	1.01 .80	11.9 3.0	26.4 16.8	61.4 80.2	.41 .65	.55 .45

<sup>a</sup>Dislike percentages reflect "Would Greatly Dislike" and "Would Dislike" responses; and like percentages, "Would Greatly Like" and "Would Like" responses.

<sup>b</sup>Civilian percentages reflect "Much More in Civilian Life" and "A Little More in Civilian Life" responses; and Navy percentages, "Much More in the Navy" and "A Little More in the Navy" responses.

<sup>c</sup>Based on a 5-point rating scale (-2 = Would Greatly Dislike; +2 = Would Greatly Like).

<sup>d</sup>Based on a 5-point rating scale (-1 = Much More in Civilian Life; +1 = Much More in the Navy).

\*p < .01

\*\*p < .05

Table 6 (Continued)

Desirability Ratings										Environmental Expectancies						
Rank	Outcome	Group	Percentage Indicating <sup>a</sup>			Statistics			Percentage Indicating <sup>b</sup>			Statistics				
			Dislike	Neither Like		Like	Mean <sup>c</sup>	S.D.	t	Civilian	Equally		Navy	Mean <sup>d</sup>	S.D.	t
				Nor Dislike	Like						Civilian/Navy	Navy				
35	Freedom to set my own work goals	Attrite Nonattrite	2.6 2.1	15.5 15.9	80.9 82.0	1.20 1.17	.82 .78	-72	44.6 37.0	32.5 35.3	22.9 35.6	-.19 -.08	.66 .59	3.23*		
36	Being in an organization which is able to meet my changing needs	Attrite Nonattrite	6.2 2.3	19.7 16.9	74.2 80.9	.97 1.13	.96 .79	3.37	24.1 15.5	42.3 34.0	33.7 50.6	.06 .25	.60 .55	6.43*		
37	Doing a real man's job (women, please omit this item)	Attrite Nonattrite	1.9 4.4	22.1 29.5	78.1 66.1	1.13 .94	.84 .96	3.84	14.3 5.5	46.3 44.1	39.5 50.5	.21 .36	.59 .50	4.86*		
38	Studying to learn my job	Attrite Nonattrite	7.6 3.5	22.5 14.5	70.0 82.0	.90 1.12	1.03 .81	4.29*	12.4 4.6	41.4 32.6	46.3 61.8	.26 .45	.56 .48	6.58*		
39	Being part of a well-disciplined organization	Attrite Nonattrite	14.0 3.2	26.5 19.0	59.3 77.9	.68 1.13	1.17 .86	7.73*	12.9 3.5	28.7 16.1	58.4 80.4	.39 .63	.62 .45	8.04*		
40	Being part of a big, important organization	Attrite Nonattrite	9.6 2.7	31.4 25.0	59.0 72.3	.76 1.07	1.08 .88	5.77*	9.6 4.7	31.4 25.5	59.0 69.8	.26 .50	.61 .48	7.91*		
41	Spending free time with people from work	Attrite Nonattrite	7.1 3.5	26.7 22.5	66.3 74.0	.88 1.04	1.04 .88	2.96*	41.6 30.7	27.1 35.0	31.4 34.4	-.10 .01	.71 .62	3.22*		
42	Able to set my own pace in getting my work done	Attrite Nonattrite	4.2 4.3	18.9 21.2	76.9 84.4	1.09 1.02	.90 .87	-1.68	52.3 49.5	29.2 32.9	18.5 17.6	-.25 -.21	.63 .55	1.32		
43	Doing difficult and demanding work	Attrite Nonattrite	25.1 11.6	42.2 40.4	32.7 47.9	.05 .49	1.15 .98	7.58*	7.8 18.4	41.8 38.8	50.3 42.8	.19 .31	.60 .49	4.17*		
44	Avoid having to do jobs which I feel are below me	Attrite Nonattrite	17.6 15.3	43.1 46.5	39.3 38.1	.32 .34	1.10 1.04	.40	32.2 32.0	43.0 45.0	23.8 23.0	-.07 -.06	.61 .54	.26		
45	Supervisors/leaders who watch their workers closely	Attrite Nonattrite	25.5 20.1	35.8 37.2	38.6 42.6	.18 .30	1.21 1.09	2.07	14.5 7.8	35.3 31.9	50.2 60.4	.30 .41	.61 .51	3.55*		

<sup>a</sup> Dislike percentages reflect "Would Greatly Dislike; and "Would Dislike" responses; and like percentages, "Would Greatly Like" and "Would Like" responses.

<sup>b</sup> Civilian percentages reflect "Much More in Civilian Life" and "A Little More in Civilian Life" responses; and Navy percentages, "Much More in the Navy" and "A Little More in the Navy" responses.

<sup>c</sup> Based on a 5-point rating scale (-2 = Would Greatly Dislike; +2 = Would Greatly Like).

<sup>d</sup> Based on a 5-point rating scale (-1 = Much More in Civilian Life; +1 = Much More in the Navy).

\*p < .01



Table 6 (Continued)

Rank	Outcome	Group	Desirability Ratings					Environmental Expectancies						
			Percentage Indicating <sup>a</sup>			Statistics		Percentage Indicating <sup>b</sup>			Statistics			
			Dislike	Neither Like Nor Dislike		Like	Mean <sup>c</sup>	S.D.	t	Civilian	Equally			
				Dislike	Nor Dislike						Civilian/Navy	Navy	Mean <sup>d</sup>	S.D.
46	Disciplined for poor work	Attrite Nonattrite	29.7 23.2	41.7 41.0	28.5 35.8	-.05 .13	1.12 1.04	3.08*	11.0 6.3	35.0 37.3	54.0 66.4	.37 .48	.58 .50	3.71*
47	Doing hard physical activity	Attrite Nonattrite	37.3 22.0	35.7 48.6	23.2 25.7	-.19 -.03	1.24 1.11	2.02*	14.0 6.7	31.8 31.7	54.2 61.6	.37 .41	.63 .49	1.51
48	Following strict rules about the way I look and dress	Attrite Nonattrite	34.9 25.8	34.7 42.2	30.3 32.0	-.13 .06	1.29 1.11	2.98*	8.8 3.4	27.3 15.2	63.8 81.4	.51 .67	.58 .45	5.87*
49	Working in close quarters with others	Attrite Nonattrite	33.7 24.8	43.1 49.6	23.2 25.7	-.19 -.01	1.22 .99	3.33*	10.5 4.4	31.1 23.2	58.4 71.9	.40 .55	.59 .48	5.04*
50	Told exactly what to do	Attrite Nonattrite	35.9 29.6	34.5 40.6	29.6 29.8	-.15 -.03	1.24 1.11	2.02**	10.1 4.7	29.7 24.1	60.3 71.1	.56 .54	.59 .48	2.64*
51	Following strict rules of behavior	Attrite Nonattrite	41.5 28.2	37.6 48.9	20.8 22.9	-.35 -.09	1.16 .98	4.47*	9.6 2.6	23.1 15.6	67.3 81.9	.52 .67	.57 .43	5.05*
52	Doing the same type of things with little chance to do many different things	Attrite Nonattrite	47.7 57.4	27.3 23.5	24.9 19.1	-.40 -.61	1.27 1.23	-3.29*	29.5 26.1	34.8 34.4	35.8 29.6	.03 -.04	.62 .58	-2.62*
53	Feeling pressured to finish jobs	Attrite Nonattrite	64.9 60.9	23.9 28.5	11.2 10.7	-.87 -.79	1.14 1.09	1.36	16.6 11.3	29.4 36.9	54.0 51.7	.33 .30	.64 .53	-.74
54	Job which interferes with family plans	Attrite Nonattrite	70.1 70.4	23.1 24.1	6.8 5.4	-1.09 -1.07	1.08 1.01	.48	19.6 13.2	29.7 31.2	50.7 55.6	.25 .33	.67 .57	2.32*
55	Being criticized for no reason	Attrite Nonattrite	77.2 81.9	14.1 10.8	8.7 7.2	-1.23 -1.30	1.12 1.05	-1.33	15.9 15.4	33.9 37.4	50.2 47.1	.31 .26	.62 .56	-1.57

<sup>a</sup>Dislike percentages reflect "Would Greatly Dislike" and "Would Dislike" responses; and like percentages, "Would Greatly Like" and "Would Like" responses.

<sup>b</sup>Civilian percentages reflect "Much More in Civilian Life" and "A Little More in Civilian Life" responses; and Navy percentages, "Much More in the Navy" and "A Little More in the Navy" responses.

<sup>c</sup>Based on a 5-point rating scale (-2 = Would Greatly Dislike; +2 = Would Greatly Like).

<sup>d</sup>Based on a 5-point rating scale (-1 = Much More in Civilian Life; +1 = Much More in the Navy).

\* $p < .01$

\*\* $p < .05$



In an attempt to determine whether the 55 work outcomes addressed organizational variables such as climate and job dimensions, a factor analysis using a varimax factor rotation was performed on the desirability ratings. Four primary factors, which accounted for 90.4 percent of the variance, emerged. As shown in Table 7, the most important factor reflects outcomes concerned with satisfying various self needs; that is, outcomes in which the individual benefited personally. These outcomes generally were evaluated positively (see Table 6), and cut across a variety of organizational factors (i.e., general considerations, immediate work environment, and job aspects). The next most important factor concerns disciplined supervision outcomes, which were evaluated on the undesirable end of the continuum (Table 6). The outcomes related to job autonomy and interpersonal relationships were rated within the moderate, although slightly desirable, evaluative range.

Outcome Environmental Expectancies. Table 6 also provides respondents' environmental expectancies (civilian or Navy) for the 55 work outcomes. Generally, more nonattrites than attrites expected work outcomes rated as either most or least desirable as more likely to occur in the Navy than in civilian life. Further, nonattrites expected the majority of the outcomes rated most desirable to occur within a Navy environment to a greater extent than did the attrites. As shown, both groups generally expected the outcomes rated as least desirable to occur within a Navy environment; however, for many of these outcomes, a significantly greater percentage of nonattrites than attrites expected them to occur in the Navy.

#### Role Attraction and Force Indices

A comparison of the role attraction index (i.e., the relative attractiveness of the Navy as compared to civilian work environments) and role force indices (motivations to remain in the Navy) determined for the two groups is provided in Table 8. The role attraction index was based on the sum of each of the 55 outcome desirability measures multiplied by their respective environmental expectancies (i.e., Navy or civilian). The more positive this measure, the more attractive the Navy was perceived as a role choice. As shown, the Navy was perceived as more attractive by the nonattrites than by the attrites, despite the fact that the indices for both groups were relatively low.

The role force indices were based on the role attraction index multiplied by the various role intentions. As shown in Table 8, the role force indices were higher for the nonattrites than for the attrites, which suggests that their motivations for completing boot camp, completing their enlistment, and reenlisting were stronger than those of the attrites.

Table 7  
Factor Analysis of Outcome Desirability Ratings<sup>a</sup>

Factor	Component	Loading
I: Self Needs	Good Working Conditions	.83
	Good salary	.68
	Good Benefits	.67
	Chances to better myself	.65
	Being treated in a fair manner	.64
	Supervisors/leaders who think of me as a person	.62
	Helpful supervisors/leaders	.62
	Interesting work/job duties	.62
	Treated with respect by leaders/supervisors	.61
	Having job security	.60
	Knowing exactly what I'm expected to do	.60
	Able to talk and work well with others	.60
	Learning skills that will be useful later in my life	.58
	Improving the quality of my life	.57
	Regular promotions and advancement	.56
	Good leadership/supervision	.54
	Treated with respect by family and friends	.53
	Supervisors/leaders who set examples for others to follow	.52
	Getting credit when I do my work duties well	.51
	Opportunity to have privacy	.49
	Doing the type of work I want	.46
II: Discipline, Supervision	Able to question supervisors/leaders about what they want me to do	.43
	Following strict rules of behavior	.78
	Following strict rules about the way I look and dress	.65
	Told exactly what to do	.60
	Working in close quarters with others	.46
	Disciplined for poor work	.43
	Supervisors/leaders who watch their workers closely	.42
III: Job Autonomy	Doing hard physical activity	.42
	Able to set my own pace in getting my work done	.62
IV: Interpersonal Relationships	Freedom to set my own work goals	.58
	Coworkers who are helpful on the job	.59
	Friendly feelings between coworkers	.53
	Supervisors willing to listen to my problems	.47
	Meeting and making new friends	.41

<sup>a</sup>Based on responses of 4873 subjects who completed all items on outcome desirability.

Table 3  
Comparison of Role Attraction and  
Force Indices for Attrites and Nonattrites

Index	Group	Mean	S.D.	N	t
Role Attraction	Attrite	7.33	23.32	412	7.03*
	Nonattrite	17.53	24.08	4412	
Role Force:					
To complete enlistment	Attrite	46.85	114.33	411	6.77*
	Nonattrite	86.91	114.31	4410	
To reenlist	Attrite	13.35	103.83	410	5.66*
	Nonattrite	43.03	73.88	4408	
To complete recruit training	Attrite	46.43	116.50	412	6.63*
	Nonattrite	86.48	115.41	4410	

\*p < .01

#### Predictors of Attrition in Recruit Training

To determine the combination of variables that best predicted recruit training attrition, the total sample for which all the data was complete (N = 4137) was randomly divided into a two-thirds validation sample (N = 2656) and a one-third cross-validation sample (N = 1531). A stepwise multiple-regression analysis, using attrition/nonattrition as the criterion and the personal and organizational variables as the predictors was then performed on the validation sample. Results are provided in Table 9, which lists the eight best predictors in the order in which additional or unique information is contributed by each subsequent predictor. In order to assess the stability of these predictors in explaining the variance of the criterion, a cross-validation procedure was performed for the smaller sample in which the same composite of predictors was correlated with the criterion. Differences in the multiple correlation for the validation and the cross-validation samples indicated the amount of "shrinkage" or decrease in accountable variance that resulted by using the same predictors on this second sample. In general, the less the shrinkage, the more similar the multiple correlations and, consequently, the more stable the predictors.

As shown in Table 9, the eight best predictors elicited a multiple correlation of .37, which accounts for approximately 14 percent of the variance in recruit training attrition. (The multiple R for the cross-validation group was .29.) The best individual predictor of recruit training attrition behavior was the stated intention to complete one's enlistment (R = .30), which accounts for approximately 9 percent of the variance. Thus, recruits who indicate that they do not intend to complete their enlistment are more likely to attrite than those who indicate that they do intend to complete their enlistment.

Table 9

Results of Stepwise Multiple Regression Analysis for  
Attrition Behavior Performed on Validation Sample (N = 2656)

Predictor	Simple R	R Square	Multiple R
Intend to complete enlistment	-.30	.088	.30
Navy provides a chance to travel	-.21	.108	.33
Intend to complete boot camp	-.26	.116	.34
Navy provides opportunity to do something important for my country	-.20	.122	.35
Regret joining the Navy	.23	.127	.36
Marital status	.06	.131	.36
Level of education	-.09	.135	.37
Chances to better myself	-.17	.138	.37 <sup>a</sup>

Note. Order of predictors is in terms of additional and unique variance.

<sup>a</sup>Multiple R for cross-validation sample (N = 1531) = .29.

#### Reasons for and Time of Attrition

The Recruit Training Centers were requested to provide information on administrative reasons for attritions occurring during the period from June through October 1977. Reasons provided were analyzed and grouped into eight major categories. Finally, the reasons why attrites in the present sample separated from the Navy were "matched" with these categories. Results are provided in Table 10, which shows that the majority of losses--almost 38 percent--was due to "military" reasons. This includes "lack of motivation" (29%), "nonadaptability" (8.6%), and "functionally inadequate" (0.2%). The second most important cause of attrition was "psychological" reasons, which includes "personality disorders" (20.6%) and "situational reactions" (1.9%). Combining these two reasons, it can be considered that most attrition--60.4 percent--is due to attitudinal and/or motivational problems. Additionally, about 17 percent attrited due to "medical" reasons, primarily for orthopedic problems (7.5% of total attrition). The majority of losses due to "academic" reasons reflected problems with reading skills.

Table 10

Reasons for Recruit Training Attritions (N = 428)

Reason	Attrites	
	Number	Percent
Military	162	37.9
Psychological	96	22.5
Medical	73	17.1
Academic	43	10.0
Convenience	30	7.0
Fraudulent enlistment	17	3.9
Nonswim	4	0.9
Unfitness	3	0.7
Total	428	100.0

Table 11, which presents attrition for the various reasons as a function of time, was developed to determine if losses were concentrated in certain periods. If a pattern appeared, appropriate steps could be taken to counteract problems occurring during pertinent time periods. As shown, the majority of attrition--55.1 percent--had occurred by the end of the fifth week. The largest percentage--19.6--occurred during the fourth week, followed by the fifth and third weeks--17.3 and 16.1 percent respectively. The remaining weekly rates were considerably lower. Further, the table shows that attrition due to military reasons occurred primarily during the fourth and fifth weeks; and those due to psychological reasons, during the third and fourth weeks.

Attrition occurred for a period of time past the standard 8 weeks of recruit training. Recruits who remained in training more than 8 weeks were considered as "setbacks"; that is, they had to repeat or make up portions of training they had missed. An examination of those who attrited after 12 weeks showed that some of them had entered the Navy up to 7 months before the study was commenced. The largest percentage of these individuals was attrited due to medical reasons. Apparently they had incurred some long-lasting dischargeable injury early in boot camp, and were not separated until they had received necessary hospitalization, medical supervision, or other extended treatment.



Table 11  
Attrition by Various Reasons as a Function of Time

Time of Attrition	Reason for Attrition							Total Percent	Cum. Percent		
	Mil.	Psych.	Med.	Acad.	Conv.	Fraud.	NSwim			Unfit	N
Standard Recruit Training:											
End of 2nd Week	0	8	1	0	0	0	0	0	0	9	2.1
End of 3rd Week	20	24	11	3	6	3	1	1	1	69	18.2
End of 4th Week	32	22	17	0	10	0	2	1	1	84	37.8
End of 5th Week	35	12	13	3	6	5	0	0	0	74	55.1
End of 6th Week	19	10	5	10	2	4	0	0	0	50	66.8
End of 7th Week	12	5	5	12	2	1	1	0	0	38	75.7
End of 8th Week	16	0	4	4	1	0	0	0	0	25	81.6
Total	134	81	56	32	27	13	4	2		349	81.6
Makeup Recruit Training:											
End of 9th Week	13	6	1	2	0	0	0	0	0	22	5.1
End of 10th Week	4	0	2	1	0	0	0	0	0	7	1.6
End of 11th Week	2	1	1	2	0	0	0	0	0	6	1.4
End of 12th Week	2	0	1	0	0	0	0	0	0	3	0.7
Total	21	7	5	5	0	0	0	0		38	8.8
Beyond 12 Weeks:	7	8	12	6	3	4	0	1		41	9.6
Grand Total	162	96	73	43	30	17	4	3		428	100.0

Note. Since questionnaires were administered at the end of the first week of recruit training, recruits who attrited during the first week were not included in the sample. Thus, reported attrition for the present sample actually began during the second week of boot camp.

## DISCUSSION AND CONCLUSIONS

### Measurement Instrument Data--Attrites vs. Nonattrites

The results demonstrated consistent and overall differences between recruit training graduates and attrites as early as the fourth day of training. These differences, which were exhibited for almost all of the individual factors (behavioral intentions, expectations, and some demographics), and the expectation variables of the organizational factors are discussed in the following paragraphs.

#### Individual Factors

Demographics. Demographic differences were found between attrites and nonattrites in educational level, AFQT scores, marital status, and age. Most important in a predictive sense, however, as found in the multiple-regression analysis, were differences in marital status and level of education. These results were generally consistent with the results of many previous military turnover studies (Hand et al., 1977; Mobley et al., 1978; Sinaiko, 1977) except for the finding that attrites were more likely to be married than were nonattrites. Past investigations generally assessed attrition/retention behaviors at a point in the enlistment cycle much later than recruit training. Since records show that the majority of enlisted personnel are not married when they enter the Navy, and findings of previous attrition studies show that those who remain or reenlist in the Navy are married, it appears that many individuals get married while in the Navy. The present findings suggest that those who are married when they enter the Navy are more likely to attrite than those who are single when they enter and get married later. Thus, it appears that individuals' perceived responsibilities to their family differ, depending on whether they were married before or after entering the Navy.

Motivations for Joining. The motivations for joining the Navy were also different for attrites and nonattrites. The responses of nonattrites indicated that they were concerned with obtaining specific individual goals that they perceived could be attained in the Navy. These goals included learning usable skills, getting more of an education, having the opportunity for training and travel, and helping to develop a sense of maturity and responsibility. This finding indicates that having definite goals for achieving specific outcomes in the Navy is an important precursor to enlistment.

The responses of attrites were more vague as to goal specification. They were less likely than the nonattrites to know specifically what they wanted. Their decision to join the Navy occurred more as a result of external or environmental influences (e.g., family trouble, lack of a civilian job, and had nothing better to do) than of obtaining individual goals. Since the enlistment decision may have represented another's aspirations or influences more than those of the individual, it may have been regretted after it was made. Consequently, the only way to resolve this conflict was to withdraw from the situation; that is, to attrite.

### Intentions, Expectations, and General Attitudes.

1. Intentions. As indicated previously, differences were found between attrites and nonattrites for all of the "intentions" items. Those found in items concerning intentions to reenlist and to leave the Navy particularly supported the findings for motivations for joining discussed above. That is, more attrites than nonattrites indicated that they did not intend to reenlist and would leave.

2. Expectations. Both attrites and nonattrites reported finding recruit training different from their expectations. However, the expectations held by attrites concerning what they would experience in the Navy were generally more negative than those held by nonattrites; thus, desirable events or outcomes were minimized in importance while undesirable events were magnified. This may have resulted in negative attitudes and evaluations by many individuals who eventually attrited. This suggests that attrites may not have been adequately prepared to cope with the environment of boot camp.

3. General Attitudes. Differences in the general attitudes were consistent in many ways with the findings for the motivations for joining. Nonattrites reported giving more thought to their enlistment decisions and were consequently more certain about why they joined the Navy than were the attrites. Thus, at least, some individuals indicated that they knew what they hoped to accomplish and obtain from the Navy. On the other hand, attrites were less certain about what they wanted to accomplish or what their goals were, reported being less satisfied, regretted their enlistment decisions, and thought more about getting out of the Navy than the nonattrites. These findings suggest the appropriateness of instituting a counseling program for individuals who have not developed specific goals for themselves. In this manner, guidance may be provided individuals who are uncertain about their career goals and how these goals can best be met in the Navy.

Personality Attributes. No meaningful relationship with attrition was found for the locus of control personality attribute. It was expected that internals would respond differently than would externals in relation to attrition behavior, expectations of leadership styles, and performance goals. Although the literature reports weak relationships at best between personality measures and attrition, the present results may be explained by the finding that little variance was demonstrated for the locus of control measure: A vast majority of recruits responded near the "internal" end of the continuum, thus skewing the distribution of responses heavily. In other words, differences may not have been detected because most individuals responded in an "internal" direction. Questions may thus arise as to whether the Rotter scale (Rotter, 1966) is appropriate for use in detecting personality differences for the present Navy sample. Also, the items in the scale may have elicited responses that individuals felt were most socially appropriate or acceptable.

### Organizational Factors

Outcome Desirability Ratings. Attrites and nonattrites further differed with regard to how desirable they found various work outcomes.

In general, attrites responded more negatively to both the desirable and undesirable outcomes. This general orientation toward work situations indicates that attrites were less certain about what they considered desirable in a work environment but not about what they considered to be undesirable. In other words, they knew what they did not want but not what they wanted. These findings support those discussed under motivations for joining, which indicated that attrites lacked specificity as to their goal orientations, while nonattrites were concerned with goals related to individual needs; that is, with outcomes in which they personally benefited. Whether these desirable outcomes are actually obtained by nonattrites or their expectations are met are matters that will be resolved over time. Nevertheless, the Navy can benefit from these findings concerning the necessity of satisfying individual needs by applying them to recruiting advertising strategies and, more importantly, ensuring that expectations elicited by such strategies are met. Also, since such factors as interpersonal relationships, supervision, and job aspects (e.g., autonomy and repetitiveness) can be expected to become more salient the longer one is in the Navy (Lau, 1978), they must be realistically and honestly addressed in recruiting campaigns.

Outcome Environmental Expectancies. Although both attrites and nonattrites anticipated that both desirable and undesirable outcomes would occur in the Navy, attrites did not expect them to occur to the same extent as nonattrites. This finding supports the importance of establishing an early preparation or preview program in which both positive and negative aspects of Navy life are accurately and realistically depicted. In conjunction with the preview, some individuals may need to be taught how to cope with situations they have never previously encountered and which they may find difficult to accept.

#### Predictors of Recruit Training Attrition

Consistent with previous turnover literature, the findings of the present study showed that the best predictor of attrition behavior was the stated intention to complete one's enlistment. This result suggested the importance of asking individuals what their intentions were with respect to particular behaviors (Ajzen & Fishbein, 1977). However, as indicated previously (Graen & Ginsburgh, 1977), the closer the intention was measured to the time of the actual behavioral decision, the more accurate and, thus, less valuable the measurement was as a predictor. Since the majority of attrition behavior in the present study occurred between 2 and 4 weeks after the intentions were measured, the interval of time between assessment of intentions and actual behavior was relatively short. Thus, the true test of the value of using stated intentions to complete one's enlistment as a predictor of attrition will be their predictive accuracy displayed over time.

Other significant attrition predictors were the intentions to complete boot camp and specific general attitudes held of the Navy. These findings suggest that individual factors were more important predictors of attrition than the organizational factors at this early point in the enlistment. It is expected, however, that shifts in the relative impact of these factors will occur as more interaction is experienced with organizational variables, especially as a result of fleet assignments (Lau, 1978). Thus, to fully understand the attrition process, both individual and organizational considerations will be investigated from a longitudinal perspective to assess changes over time.



Although the role attraction and force indices were significantly different for the attrite and nonattrite groups, they did not emerge as predictors of attrition in the multiple regression analyses conducted. This may be due, at least in part, to the correlations between these indices and the intention to complete one's enlistment, which ranged from .28 to .32. Therefore, they may be assessing the same type of information. Since the intention item had a higher correlation with attrition than these indices, little additional predictability would be contributed by adding them. However, when attrition is assessed longitudinally over a longer period of time, and the attraction indices become more stable as a result of the increased interaction, exposure, and experience with the Navy, it is expected that their predictability will increase.

#### Reasons for and Time of Attrition

The administrative reasons for attrition during recruit training predominately reflected motivational and attitudinal problems. These attritions occurred relatively early in recruit training--within the first 5 weeks--which is surprising when considering the apparent voluntary nature of the enlistment decision. Thus, despite the ambiguity of the reason for separation categories, it appears that something occurred to elicit the negative reactions of those who eventually attrited--either during the period between their enlistment and entry into boot camp or shortly after they began recruit training.

Since assessments were made at the fourth day of recruit training, no information was available on recruits' attitudinal predispositions prior to their entry into boot camp. Thus, events experienced by those recruits between their enlistment and arrival at recruit training may have differentially affected their intention to stay in the Navy, especially if there was a delay in reporting for duty. In other words, different attitudes may have been formed by individuals who had the option to delay their entry into the Navy and those without this option. On the other hand, intentions of eventual attrites may have been affected by events occurring early in boot camp--even before the fourth day. In other words, problems are occurring early and being acted on relatively quickly. Thus, if attrition is to be reduced, it appears that recruits should be provided with a realistic preview of recruit training and life in the Navy prior to or early in boot camp so that initial attitudes and expectations, if negative, can be countered.

It should be remembered, however, that boot camp does provide an environment where individuals who are identified as potentially inadequate performers in the fleet can be screened and, if necessary, separated from the Navy. In this way, individuals with specific medical problems, academic deficiencies that cannot be remediated, and specific psychological disorders can be separated at a time when investment costs are relatively low, rather than at some later time.



### Problems in Interpretation

Particular care must be exercised when interpreting the previously reported findings because of the statistically artifactual nature of using large sample sizes. When large sample sizes are investigated, as in the present study, small differences between groups may be magnified so that they result in statistical significance, even though meaningful differences, in terms of utility or practical significance, may not actually exist. Therefore, the differences between the means and standard deviations between groups should be carefully examined instead of relying solely on statistical significance tests. The results of the present study emphasized general, consistent findings and correspondent interpretations rather than focusing on specific items or isolated outcomes.

## RECOMMENDATIONS

1. A preview program that realistically and accurately depicts the positive and negative aspects of Navy life should be developed and implemented. If such a program were presented prior to enlistment, it would enable individuals to make more knowledgeable enlistment decisions. If it were presented early in recruit training, it would serve to make them aware of events or situations that will occur so that they will know how to deal with these events when they are encountered. That is, it would reduce the disappointments and "culture shock" that are often experienced in individuals' initial interaction with boot camp when totally unforeseen events occur. When expectations do not match experiences, negative attitudes, dissatisfaction, and motivational problems result, which may, in turn, lead to attrition. The results of several studies have shown that realistic job previews have indeed reduced attrition. Most recently, preliminary results by William Mobley and his associates, working on an ONR contract (which has not yet been published), have demonstrated the success of a realistic preview in reducing attrition for a group of Marine recruits.

2. A method should be developed for teaching recruits how to cope with various stresses of boot camp. Even after being given a realistic preview of Navy life, some potentially productive individuals may still have difficulty in adjusting to boot camp. Most recruits are young and are away from home for the first time. The demands of recruit training may be too foreign, too different for them to adapt to without adequate instruction. Thus, various strategies should be taught these individuals to help them cope with or adjust to various situations they may encounter. It is important to note that the goals of recruit training are not to allow all recruits to graduate, since this environment serves to eliminate those who would not be successful or dependable in the fleet. Thus, the purpose of the realistic preview and the teaching of coping skills would not be to ensure that everyone graduated but, rather, to provide additional help to individuals who would potentially make a contribution to the Navy but who may need a little help in adjusting early in their training.

3. A personal counseling program should be provided for individuals who are uncertain about their career goals and how these goals can best be met in the Navy. The findings of this study showed that attrites were less certain than nonattrites about why they joined and were more influenced by others rather than their own values and needs. If accurate advice had been provided to these individuals concerning their opportunities and potentials within the Navy early in boot training, many potential problems may have been averted. Theoretically, providing such advice is one of the functions of the recruiter; however, for a variety of reasons, these duties are often omitted or ignored. In other cases, inaccurate and misleading information is often provided.

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APPENDIX  
NEW RECRUIT QUESTIONNAIRE



DEPARTMENT OF THE NAVY

NAVY PERSONNEL RESEARCH AND DEVELOPMENT CENTER  
SAN DIEGO, CALIFORNIA 92152

*Dear Recruit:*

*You have been selected as one of a group of recruits who will be surveyed at various points during your enlistment. We are interested in obtaining your ideas, feelings, and thoughts about the Navy. The information you give will be extremely helpful in determining how people adjust to Navy life. Maintaining the quality and attractiveness of the Navy is an ongoing effort. What you tell us will be useful to Navy management in evaluating present and future personnel policies. Therefore, your frankness when answering the questions is very important.*

*Your individual responses are confidential. They will be combined with the responses of many others who are in positions similar to your own. The only reason we are asking you to write your name and social security number is so that we can contact you at a later date.*

*If at any time you have questions concerning the study or the results, let us know where you can be reached by writing to the address below. We will then provide you with what information we can.*

*Your helpfulness is greatly appreciated.*

*Commanding Officer  
Code 307  
Navy Personnel Research and Development  
Center  
San Diego, California 92152*

## NEW RECRUIT QUESTIONNAIRE

This questionnaire is not a test. There are no "right" or "wrong" answers. We are interested in finding out how new recruits feel about their lives in the Navy. Your answers will be combined with those of many others and be used to recommend improvements in the Navy's enlisted personnel practices.

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### PROTECTION OF INDIVIDUAL PRIVACY

Under the authority of 57SC301, as reflected in OPNAV Notice 5450 of 17 April 1975, information is requested regarding your personal opinions and attitudes. The information will be used for statistical purposes only. In no case will an individual's response be used in making decisions affecting him personally. You are not required to provide this information; your participation is voluntary.

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### INSTRUCTIONS

1. (a) Take your General Purpose-OMR-Answer Sheet and turn it to the side with the large green "B" and "C" sections. Turn the sheet so that the heavy black lines are at the bottom of the page.
- (b) Now, print your name, last name first in the boxes in the top left hand corner of the sheet. If your last name is less than nine (9) letters, leave a blank after your last name and print your first name in the remaining boxes. An example is given at the right.
- (c) Below each box, completely fill in each circle that matches that letter of your name.

[illegible]

2. (a) Write your Social Security Number in the appropriate boxes.
- (b) Completely fill in the circles that match each of these numbers.  
An example is shown at the right.

[illegible]

3. (a) The section mark "CO. NO." is for your company number. Write your company number in the appropriate boxes. The example to the right would be for someone whose company number is 503. Company number 42 would be written as 042.
- (b) As shown by the example, darken the circles below each of these numbers.
4. In the appropriate section, completely darken the circle which specifies your sex, "MALE" or "FEMALE."

CO. NO.		
5	0	3
①	●	①
①	①	①
②	②	②
③	③	●
④	④	④
●	⑤	⑤
⑥	⑥	⑥
⑦	⑦	⑦
⑧	⑧	⑧
⑨	⑨	⑨



5. In the section labelled "AGE," write in your age in years and months. For example, if you are 18 years and 3 months old, you would write in 1803; if you are 17 years and 11 months old, you would write 1711. Darken the appropriate circles below these numbers.
6. The "SPECIAL CODES" part of your answer sheet is used for the following questions. Fill in the circles that match your answers.
- |  |   |
|--|---|
| <p>A. What is your current status in the Navy?</p> <ul style="list-style-type: none"> <li>0. Beginning basic training</li> <li>1. Finishing basic training</li> <li>2. In a Class "A" school</li> <li>3. Finishing apprenticeship training</li> <li>4. On a duty assignment</li> </ul> | <p>D. When looking at a map, in what part of the country is your home town located?</p> <ul style="list-style-type: none"> <li>0. North</li> <li>1. South</li> <li>2. Midwest</li> <li>3. East</li> <li>4. West</li> </ul>  |
| <p>B. Where is your Recruit Training Command located?</p> <ul style="list-style-type: none"> <li>0. San Diego</li> <li>1. Orlando</li> <li>2. Great Lakes</li> </ul>   | <p>E. What were you doing at the time you joined the Navy?</p> <ul style="list-style-type: none"> <li>0. Going to high school</li> <li>1. Going to college</li> <li>2. Going to a trade school</li> <li>3. Working full-time</li> <li>4. Working part-time</li> <li>5. Neither going to school nor working</li> <li>6. Working and going to school</li> </ul> |
| <p>C. What is your current marital status?</p> <ul style="list-style-type: none"> <li>0. Single</li> <li>1. Married</li> <li>2. Divorced</li> <li>3. Widowed</li> <li>4. Separated</li> </ul>  |   |
7. Below this section are some circles for the "Highest Grade Passed." Fill in the circle which best describes your educational level. If you have a GED certificate, darken the very last circle in this section.
8. Now turn your answer sheet over to the side with the large letter "A."
9. (a) You are now ready to begin answering this questionnaire. Completely fill in the spaces on your answer sheet which matches how you feel about each question.
- (b) If you want to change an answer, please erase your old answer completely.
10. After you have completed answering all of the questions on Side "A" of your answer sheet (up to Question 120), you are to answer the remaining questions on Side "B" of your answer sheet (new Questions 1 - 32). Do not turn to side "B" now. You are to do this only after you have finished answering the questions on side "A."
11. Please read the instructions before each section carefully. Use the scales shown under each section to answer the questions that follow. Only use the letters A, B, C, D, or E to show how you feel about each question. Ignore the "T" and "F" responses on your answer sheet.
12. Please answer each question as honestly as you can.

### A. MOTIVATIONS FOR JOINING

For the following items, please indicate the extent to which each influenced your decision to join the Navy. Mark the appropriate letter on your answer sheet using the following scale:

No Influence	Little Influence	Some Influence	Much Influence	Strong Influence
(A)	(B)	(C)	(D)	(E)

1. To serve my country
2. To get away from home
3. To mature
4. To develop a sense of responsibility
5. To get an education
6. Job security
7. Trouble with family members
8. Friends
9. Want naval career
10. Difficulty in finding a civilian job
11. To travel
12. To learn a skill
13. Had nothing better to do
14. Benefits (financial, medical, insurance)
15. To be part of something important
16. Time to decide what I want to do with my life
17. My recruiter
18. Going to sea
19. Advice from family members

### B. GENERAL ATTITUDES

Indicate the extent to which you agree or disagree with the following statements. Mark the appropriate letter on your answer sheet using the following scale:

Greatly Disagree	Some Disagreement	Uncertain	Some Agreement	Greatly Agree
(A)	(B)	(C)	(D)	(E)

20. I gave much thought to enlisting in the Navy
21. I intend to complete my enlistment
22. I really don't know why I joined the Navy
23. My recruiter was generally truthful in what he told me
24. I do not intend to reenlist after finishing my enlistment
25. I intend to make the Navy my career
26. I am sorry that I joined the Navy
27. I think a lot about getting out of the Navy
28. I intend to complete boot camp
29. I would leave the Navy if I had the chance
30. So far I am generally satisfied with the Navy
31. There are a lot of things I wish my recruiter would have told me that he didn't
32. My life so far in boot camp is different from what I thought it would be like
33. Boot camp is what the Navy is really like
34. I expect to do a lot of things I don't like in boot camp

### C. DESIRABILITY RATINGS

Carefully read each of the statements below. Then indicate the extent to which you would like to have these things associated with work situations, in general.

Use the following scale to mark the letter on your answer sheet which shows how you feel about that statement.

Would Greatly Dislike	Would Dislike	Neither Like Nor Dislike	Would Like	Would Greatly Like
(A)	(B)	(C)	(D)	(E)

35. Interesting work/job duties
36. Good working conditions
37. Treated with respect by leaders/supervisors
38. Chances to better myself
39. Good benefits (medical, insurance)
40. Good salary
41. Helpful supervisors/leaders
42. Working as part of a team
43. Doing difficult and demanding work
44. Taking pride in my work
45. Doing something important for my country
46. Being part of a well-disciplined organization
47. Helping others on the job
48. Supervisors/leaders who think of me as a person
49. Gaining responsibility
50. Being treated in a fair manner
51. Doing the type of work I want
52. Having job security
53. Able to talk and work well with others on the job
54. Improving the quality of my life
55. Knowing exactly what I'm expected to do on my job
56. Treated with respect by family and friends
57. Being part of a big, important organization
58. Getting credit when I do my work duties well
59. Doing the same type of things with little chance to do many different things
60. Friendly feelings between co-workers
61. Supervisors/leaders willing to listen to my problems
62. Good leadership/supervision
63. Spending free time with people from work
64. Job which interferes with family plans
65. Feeling pressured to finish jobs
66. Co-workers who are helpful on the job
67. Supervisors/leaders who set good examples for others to follow
68. Learning skills that will be useful later in my life
69. Chance to travel
70. Opportunity to have privacy
71. Chance to use my free time for things I like to do
72. Supervisors/leaders who watch their workers closely
73. Meeting and making new friends
74. Regular promotions and advancements
75. Chances to fully use my abilities on the job

Would Greatly Dislike	Would Dislike	Neither Like Nor Dislike	Would Like	Would Greatly Like
(A)	(B)	(C)	(D)	(E)

76. Freedom to set my own work goals
77. Able to set my own pace in getting my work done
78. Being in an organization which is able to meet my changing needs
79. Following strict rules about the way I look and dress
80. Working in close quarters with others
81. Able to question supervisors/leaders about what they want me to do
82. Avoid having to do jobs which I feel are below me
83. Being criticized for no reason
84. Doing hard physical activity
85. Following strict rules of behavior
86. Told exactly what to do
87. Disciplined for poor work
88. Studying to learn my job
89. Doing a real man's job (women, please omit this item)

#### D. NAVY-CIVILIAN COMPARISONS

In this section, rate the following items according to where you would most likely expect them to occur, either in the Navy or in civilian life.

Again, please read each statement very carefully and mark the response choice on your answer sheet which best indicates how you feel about that item.

Use the following scale to make your choice:

Much More in Civilian Life	A Little More in Civilian Life	Equally in the Navy or Civilian Life	A Little More in the Navy	Much More in the Navy
(A)	(B)	(C)	(D)	(E)

90. Interesting work/job duties
91. Good working conditions
92. Treated with respect by leaders/supervisors
93. Chances to better myself
94. Good benefits (medical, insurance)
95. Good salary
96. Helpful supervisors/leaders
97. Working as part of a team
98. Doing difficult and demanding work
99. Taking pride in my work
100. Doing something important for my country
101. Being part of a well-disciplined organization
102. Helping others on the job
103. Supervisors/leaders who think of me as a person
104. Gaining responsibility
105. Being treated in a fair manner
106. Doing the type of work I want
107. Having job security
108. Able to talk and work well with others on the job



Much More in Civilian Life	A Little More in Civilian Life	Equally in the Navy or Civilian Life	A Little More in the Navy	Much More in the Navy
(A)	(B)	(C)	(D)	(E)

109. Improving the quality of my life
110. Knowing exactly what I'm expected to do on my job
111. Treated with respect by family and friends
112. Being part of a big, important organization
113. Getting credit when I do my work duties well
114. Doing the same type of things with little chance to do many different things
115. Friendly feelings between co-workers
116. Supervisors/leaders willing to listen to my problems
117. Good leadership/supervision
118. Spending free time with people from work
119. Job which interferes with family plans
120. Feeling pressured to finish jobs

**NOW TURN YOUR ANSWER SHEET OVER TO SIDE "B." ANSWER THE REMAINING QUESTIONS STARTING WITH QUESTION 1 ON THE LEFT SIDE OF THE SHEET.**

Much More in Civilian Life	A Little More in Civilian Life	Equally in the Navy or Civilian Life	A Little More in the Navy	Much More in the Navy
(A)	(B)	(C)	(D)	(E)

1. Co-workers who are helpful on the job
2. Supervisors/leaders who set good examples for others to follow
3. Learning skills that will be useful later in my life
4. Chance to travel
5. Opportunity to have privacy
6. Chance to use my free time for things I like to do
7. Supervisor/leaders who watch their workers closely
8. Meeting and making new friends
9. Regular promotions and advancements
10. Chances to fully use my abilities on the job
11. Freedom to set my own work goals
12. Able to set my own pace in getting my work done
13. Being in an organization which is able to meet my changing needs
14. Following strict rules about the way I look and dress
15. Working in close quarters with others
16. Able to question supervisors/leaders about what they want me to do
17. Avoid having to do jobs which I feel are below me
18. Being criticized for no reason
19. Doing hard physical activity
20. Following strict rules of behavior
21. Told exactly what to do
22. Disciplined for poor work
23. Studying to learn my job
24. Doing a real man's job (women, please omit this item)



**E. PERSONAL BELIEFS**

Please answer each of the following questions according to the alternative you most closely agree with, either A or B.

After making your choice fill in the appropriate circle for that statement on your answer sheet.

- 25. (A) In the long run people get the respect they deserve in this world.  
(B) Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
- 26. (A) Without the right breaks one cannot be an effective leader.  
(B) Capable people who fail to become leaders have not taken advantage of their opportunities.
- 27. (A) Becoming a success is a matter of hard work; luck has little or nothing to do with it.  
(B) Getting a good job depends mainly on being in the right place at the right time.
- 28. (A) In my case getting what I want has little or nothing to do with luck.  
(B) Many times we might just as well decide what to do by flipping a coin.
- 29. (A) Who gets to be the boss often depends on who was lucky enough to be in the right place first.  
(B) Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.
- 30. (A) As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.  
(B) By taking an active part in political and social affairs, the people can control world events.
- 31. (A) Most people don't realize the extent to which their lives are controlled by accidental happenings.  
(B) There really is no such thing as "luck."
- 32. (A) Many times I feel that I have little influence over the things that happen to me.  
(B) It is impossible for me to believe that chance or luck plays an important role in my life.

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Lowry Air Force Base  
Program Manager, Life Sciences Directorate, Air Force Office of  
Scientific Research (AFSC)  
Army Research Institute for the Behavioral and Social Sciences  
Army Research Institute for the Behavioral and Social Sciences Field  
Unit--USAREUR (Library)  
Military Assistant for Training and Personnel Technology, Office of the  
Under Secretary of Defense for Research and Engineering  
Director for Acquisition Planning, OASD(MRA&L)  
Commandant, Industrial College of the Armed Forces

Science and Technology Division, Library of Congress  
Coast Guard Headquarters (G-P-1/62)  
Center for Naval Analyses  
National Science Foundation  
Defense Documentation Center





